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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/456,676	12/09/1999	TEJASWI VISHWAMITRA	NTI/203	6760

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EXAMINER
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MEI, XU

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 12/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/456,676

Applicant(s)

VISHWAMITRA, TEJASWI

Examiner

Xu Mei

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 and 26-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-24 is/are allowed.
- 6) ☒ Claim(s) 26-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This communication is responsive to the applicant's amendment dated 08/22/2005.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 26 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al (US-4,831,652, hereafter, Anderson).

Regarding claim 30, Anderson discloses a reconfigurable speaker system (see audio expansion circuit of Fig. 1) comprising: a source that produces a first signal and a second signal (R, L); a switch (2) having a first position and a second position, the switch receiving the first signal and the second signal; a first audio driver (R output inherently connected/coupling to a speaker for generating output R signal) connected to the switch, the first audio driver producing a first sound in response to one of the first signal and the

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second signal when the switch is located in the first position, the first audio driver producing a second sound in response to a combination of the first signal and the second signal when the switch is located in the second position; and at least one second audio driver connected to the switch, the second audio driver (L output inherently connected/coupled to a speaker for generating output L signal) producing a third sound in response to one of the first signal and the second signal when the switch is located in the first position, the at least one second audio driver producing a fourth sound in response to the combination of the first signal and the second signal when the switch is located in the second position. As discloses in Col. 1, lines 29-61, when switch 2 is coupled to line 1 and 1a (expanded stereo is not desired), i.e., switch is located in first position as claimed, R and L signals passed directly through switch 2 to output line 8 and 9 of right and left output speakers or drivers; when switch 2 is coupled expansion circuit 3 having outputs 4 and 5, i.e., switch is located in second position as claimed,  $L + X(L-R)$  and  $R + X(R-L)$  signals (the combination of first and second signals as claimed) are outputted on line 8 and 9 respectively for right and left output speakers or drivers.

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Claim 26 is broader than claim 30 in term of the second audio driver that is receiving at least one of the first signal and second signal, the second audio driver producing a third sound thereof. This limitation clearly met by the first switching position as discussed above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 27-29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Hipps et al (US-5,212,732)

Regarding claims 27, 31 and 33, Anderson's speaker system as discussed in claims 26 and 30 above fails to show the audio drivers including dual voice coil. It is old and well known in the audio art to utilize dual voice coil speaker or driver for generating or reproducing audio output with optimal and desired audio output with enhanced frequency response. Hipps discloses

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a speaker system including such dual voice woofers for generating optimal and desired frequency audio output as shown in 5 and describes in col. 4, line 40-col. 5, line 15. It would have been obvious to one of ordinary skill in the art to utilizing the dual voice coil speakers or woofers for generating/reproducing audio outputs by Anderson in order to obtain optimal and desired audio outputs with enhanced frequency response as shown by Hipps.

For what's called for in claims 28-29, 32 and 34, Hipps discloses the speaker system including both tweeters and woofers.

6. Claims 1-24 are allowed over prior art of record.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Scholten et al, McCarthy, and Petroff are made of record here as pertinent art to the claimed invention. The cited three references disclose different audio signal processing system including signal switching means.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is

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reminded of the extension of time policy as set forth in 37 CFR 1.136(a) .

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xu Mei whose telephone number is 571-272-7523. The examiner can normally be reached on Monday-Friday (9:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Xu Mei  
Primary Examiner  
Art Unit 2644  
12/01/2005